

**WHAT IS CLAIMED IS:**

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1. A method for automatically publishing data in a final publication format, the method comprising the steps of:

- (a) analyzing the data to decompose the data into a plurality of objects;
- (b) converting each object to an internal publication format; and
- (c) rendering said internal publication format in the final publication format.

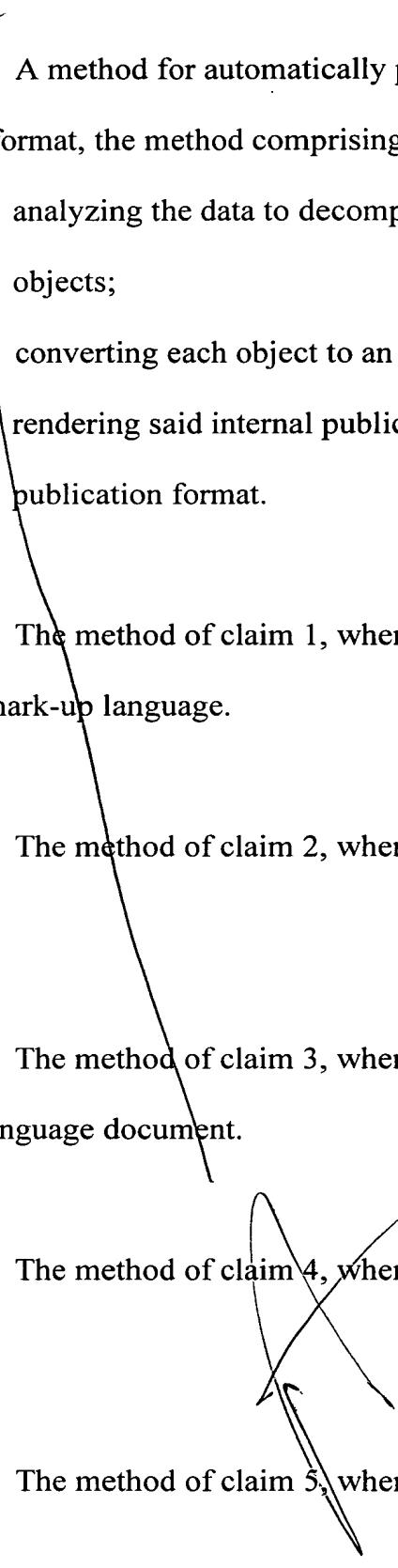
2. The method of claim 1, wherein said internal publication format is a mark-up language.

3. The method of claim 2, wherein said mark-up language is XML.

4. The method of claim 3, wherein the final publication format is a mark-up language document.

5. The method of claim 4, wherein the data is in a form of a newspaper.

6. The method of claim 5, wherein step (a) further comprises the



step of decomposing a layout of each page of said newspaper into a plurality of blocks, each block representing an object.

*sub 7* 7. The method of claim 6, wherein said layout is decomposed by classifying each object according to a category selected from the group

consisting of an article, an advertisement, a picture not otherwise associated with said article or said advertisement, and general data.

8. The method of claim 6, wherein said object is constructed in step (b) from content and at least one attribute of said object in said layout.

9. The method of claim 8, wherein said object is composed of a plurality of primitives, each primitive containing a portion of content and an attribute.

10. The method of claim 9, wherein each attribute is stored in an XML tag.

11. The method of claim 10, wherein at least one attribute describes a relationship between said primitives of said object.

12. The method of claim 1, wherein step (c) is performed according to a type of hardware device for displaying the final publication

format.

13. The method of claim 12, wherein step (c) is performed only after a query from a specific hardware device is received.
14. The method of claim 1, wherein step (a) further comprises the steps of:
  - (i) preparing a list of text and/or graphic elements for each object;
  - (ii) determining properties of each element; and
  - (iii) recognizing structural layout properties of the data.
15. The method of claim 14, wherein step (ii) includes the step of determining visibility and overlap characteristics for each graphic element.
16. The method of claim 14, wherein step (ii) includes the step of determining a special characteristic for each text element.
17. The method of claim 14, wherein the data is in a form of a newspaper, and step (a) further comprises the steps of:
  - (iv) determining each text segment for each object; and
  - (v) building a text block from a plurality of aligned text segments.
18. The method of claim 17, wherein step (a) further comprises the

steps of:

- (vi) creating a graphic block from a plurality of graphic elements;
- (vii) creating a hierarchy of graphic blocks; and
- (viii) distributing text blocks in said hierarchy of graphic blocks.

19. A system for automatically publishing data in a computerized format, the system comprising:

- (a) a source of the data in a digital format;
- (b) a mark-up language distiller module for converting the data in said digital format to a mark-up language format; and
- (c) a publisher server for converting the data from said mark-up language format to a final publication format.

20. The system of claim 19, wherein said mark-up language distiller module converts the data to a plurality of objects, each object having content and at least one attribute of the data.

21. The system of claim 20, wherein said mark-up language format is XML.

22. The system of claim 21, further comprising:

- (d) a repository for storing said plurality of objects, wherein each object features data in said XML format and an image of the

data.

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